

## Title (en)

Package for a semiconductor chip with a thermally conductive base and resin walls

## Title (de)

Gehäuse für ein Halbleiterchip mit einer thermisch leitenden Platte und Harzwänden

## Title (fr)

Boîtier pour une puce semi-conductrice avec une embase de support thermoconductrice et parois en matière résine

## Publication

**EP 1187197 A3 20040317 (EN)**

## Application

**EP 01120654 A 20010830**

## Priority

JP 2000264084 A 20000831

## Abstract (en)

[origin: EP1187197A2] The lower end of a resin wall (40) is bonded to a radiating plate (20), and a lead (30) is fixed so as to extend through the resin wall. After a semiconductor chip (1) is bonded thereto, a resin lid (50) is put to seal the semiconductor chip. Recessed parts for burying the lower end of the resin wall (40) are formed on the side parts of the radiating plate (20), and protruding parts are further provided within the recessed parts. The lead (30) has holes formed on the package outer part and the resin wall inner part. The loading surface of the semiconductor chip is finished with silver plating, and the package exterior and the lead are plated with gold. The shape fitted to the resin wall is imparted to the resin lid, and the resin lid is further formed into a vertically plane symmetric shape. <IMAGE>

## IPC 1-7

**H01L 23/043**; **H01L 23/047**; **H01L 23/31**; **H01L 21/56**; **H01L 23/498**

## IPC 8 full level

**H01L 23/34** (2006.01); **H01L 23/047** (2006.01); **H01L 23/08** (2006.01)

## CPC (source: EP KR US)

**H01L 23/047** (2013.01 - EP US); **H01L 23/34** (2013.01 - KR); **H01L 24/48** (2013.01 - EP US); **H01L 2224/05554** (2013.01 - EP US); **H01L 2224/05599** (2013.01 - EP US); **H01L 2224/45099** (2013.01 - EP US); **H01L 2224/48091** (2013.01 - EP US); **H01L 2224/48247** (2013.01 - EP US); **H01L 2224/85444** (2013.01 - EP US); **H01L 2224/85455** (2013.01 - EP US); **H01L 2224/8547** (2013.01 - EP US); **H01L 2924/00014** (2013.01 - EP US); **H01L 2924/01078** (2013.01 - EP US); **H01L 2924/01079** (2013.01 - EP US); **H01L 2924/10161** (2013.01 - EP US); **H01L 2924/13091** (2013.01 - EP US); **H01L 2924/16195** (2013.01 - EP US); **H01L 2924/181** (2013.01 - EP US); **H01L 2924/18301** (2013.01 - EP US)

## Citation (search report)

- [XY] US 4649460 A 19870310 - MARCHISI GIUSEPPE [IT], et al
- [XY] US 3767839 A 19731023 - BEAL J
- [X] US 5757075 A 19980526 - KITAOKA KOUKI [JP]
- [Y] US 4510677 A 19850416 - COLLUMEAU YOLAND [FR]
- [A] GB 1318821 A 19730531 - FERRANTI LTD
- [Y] PATENT ABSTRACTS OF JAPAN vol. 018, no. 225 (E - 1541) 22 April 1994 (1994-04-22)
- [A] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 08 6 October 2000 (2000-10-06)

## Cited by

EP1341228A3; EP2618370A1; FR2985855A1; US7002803B2

## Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

## DOCDB simple family (publication)

**EP 1187197 A2 20020313**; **EP 1187197 A3 20040317**; **EP 1187197 B1 20070307**; AT E356432 T1 20070315; DE 60127053 D1 20070419; DE 60127053 T2 20071213; JP 2002076158 A 20020315; JP 3533159 B2 20040531; KR 20020018145 A 20020307; TW I277182 B 20070321; US 2002025606 A1 20020228; US 7429791 B2 20080930

## DOCDB simple family (application)

**EP 01120654 A 20010830**; AT 01120654 T 20010830; DE 60127053 T 20010830; JP 2000264084 A 20000831; KR 20010052856 A 20010830; TW 90121448 A 20010830; US 94244501 A 20010830